

AMENDMENTS TO THE CLAIMS:

The following listing of claims replaces all prior listings of claims in the present application.

What Is Claimed Is:

Claims 1-7. (canceled)

Claim 8 (currently amended) A microphone array apparatus comprising:

a microphone array including microphones;

a signal estimator which estimates positions of a plurality of estimated microphones in accordance with intervals at which the microphones are arranged by using output signals of the microphones and a velocity of sound and which outputs ~~the~~ further output signals of the plurality of estimated microphones estimated to be at the ~~estimated~~ positions together with the output signals of the microphones forming the microphone array; and

a synchronous adder which aligns phases of the output signals of the microphones and the further output signals of the plurality of estimated microphones and then adds the output signals and the further output signals.

Claim 9 (currently amended) The microphone array apparatus as claimed in claim 8, further comprising a reference microphone located on an imaginary line connecting the ~~microphone~~ microphones forming the microphone array and arranged at intervals at which the microphones forming the microphone array are arranged,

wherein the signal estimator corrects the ~~estimated~~ positions of the plurality of estimated

microphones and the output signals thereof on [[the]] a basis of the output signals of the microphones forming the microphone array.

Claim 10 (original) The microphone array apparatus as claimed in claim 9, further comprising an estimation coefficient decision unit weights an error signal which corresponds to a difference between the output signal of the reference microphone and the output signals of the signal estimator in accordance with an acoustic sense characteristic so that the signal estimator performs a signal estimation operation on a band having a comparatively high acoustic sense with a comparatively high precision.

Claim 11 (previously presented) The microphone array apparatus as claimed in claim 8, wherein;

given angles are defined which indicate directions of a sound source with respect to the microphones forming the microphone array;

a plurality of signal estimators each associated with one of the given angles are provided;

a plurality of synchronous adders each associated with one of the given angles are provided; and

the microphone array apparatus further comprises a sound source position detector which outputs information concerning the position of a sound source based on a maximum value among the output signals of the plurality of the synchronous adders.

Claim 12 (canceled)